



November 14, 2017

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: GN Docket No. 17-183
***Ex Parte* Notice**

Dear Ms. Dortch:

Pursuant to Section 1.1200, *et seq.*, of the Commission's Rules, National Public Radio, Inc. ("NPR") hereby notifies the Commission of the following *ex parte* presentation in the above-referenced proceedings.

On Monday, November 13, 2017, Michael Riksen, NPR Vice President for Policy and Representation, Michael Beach, NPR Vice President for Distribution, and Adam Shoemaker, NPR Counsel, accompanied by Josh Finestone of Navigators Global, met with Kevin Holmes, Legal Advisor to Commissioner Carr.

In the meeting, the parties discussed NPR's concerns about possible changes to the Commission's rules regarding the use and licensing of C-band spectrum (3.7-4.2 GHz), on which the public radio system depends for reliable distribution of programming to the 475 public radio earth stations that together broadcast public radio programming to 42 million Americans each week. In particular, we discussed a provision of the Public Broadcasting Act that enables Congress to support periodic upgrades of the Public Radio Satellite System (PRSS). For FY 2018, Congress approved the first of a multi-year financial contribution that will exceed \$50 million to update the PRSS's satellite-based distribution system over the next ten years.

NPR's representatives explained that because the PRSS's downlinks use extremely low-power transmissions, there is a virtual certainty that any other terrestrial use of this C-band spectrum would create interference that would not be remediable and would disrupt broadcasts of public radio programming.

During its discussions, NPR provided the attached materials to Mr. Holmes.

Please direct any questions you may have to the undersigned at 202.513.3275.

Sincerely,

Adam Shoemaker /s/
Adam Shoemaker
Counsel

cc: Kevin Holmes



Key facts: C-Band Satellite Usage by public radio

On October 2, 2017, NPR filed comments with the FCC regarding the agency's Notice of Inquiry (NOI) to expand flexible use in the C-Band spectrum. Below is a summary of those comments and how this change would affect our current C-Band operations.

Why satellite delivery is essential for public media:

- Public radio's infrastructure relies on satellite distribution to deliver content to its interconnected stations.
- Without satellite delivery for the interconnection system, the U.S.'s nationwide public radio and public safety information distribution systems would cease to exist as they do today.
- Public media's infrastructure system provides Americans with timely, critical information before, during and in the wake of emergencies.
- Satellite delivery is the most cost-effective, secure, and reliable technology currently available to serve this national infrastructure. It is critical to reach even the most rural and remote regions of the U.S.

Background and audience impact:

- **The Public Radio Satellite System (PRSS)**, which is managed by NPR, **distributes** more than 450,000 hours of news, music, and specialized audience programming from over 100 producers, including NPR, APM, and PRI
- **PRSS reaches** 95% of the U.S. population
- **PRSS connects:**
 - 400 PRSS interconnected stations
 - 872 additional licensed stations
 - 1,278 broadcasting stations
- **PRSS leases satellite transponders from Intelsat on C-band and KU spectrum:**

Uplink Frequencies

Galaxy 01/Transponder1, C-Band	(Lower Frequency 5927.00 to Upper Frequency 5963.00)
Galaxy 03/Transponder1, C-Band	(Lower Frequency 5967.00 to Upper Frequency 6003.00)
Galaxy 05/Transponder1, C-Band	(Lower Frequency 6007.00 to Upper Frequency 6043.00)
Galaxy 07/Transponder1, C-Band	(Lower Frequency 6047.00 to Upper Frequency 6083.00)
Galaxy 17/Transponder1, Ku	(Lower Frequency 14210.80 to Upper Frequency 14218.00)

Downlink Frequencies

Galaxy 01/Transponder1, C-Band	(Lower Frequency 3702.00 to Upper Frequency 3738.00)
Galaxy 03/Transponder1, C-Band	(Lower Frequency 3742.00 to Upper Frequency 3778.00)
Galaxy 05/Transponder1, C-Band	(Lower Frequency 3782.00 to Upper Frequency 3818.00)
Galaxy 07/Transponder1, C-Band	(Lower Frequency 3822.00 to Upper Frequency 3858.00)
Galaxy 17/Transponder1, Ku	(Lower Frequency 11910.80 to Upper Frequency 11918.00)



- **PRSS receives and distributes Presidential-level information from FEMA's** national Emergency Alert System (EAS)
- **PRSS is reliable: provides** 99.99% uptime
- **PRSS content** is 80% live
- **PRSS is funded** by Congress through the Corporation for Public Broadcasting (CPB).
- **PRSS is open** to all public telecommunications entities, including independent producers; program syndicators and distributors; national, state, and local organizations; and public radio stations.

Summary of NPR's FCC NOI Comments:

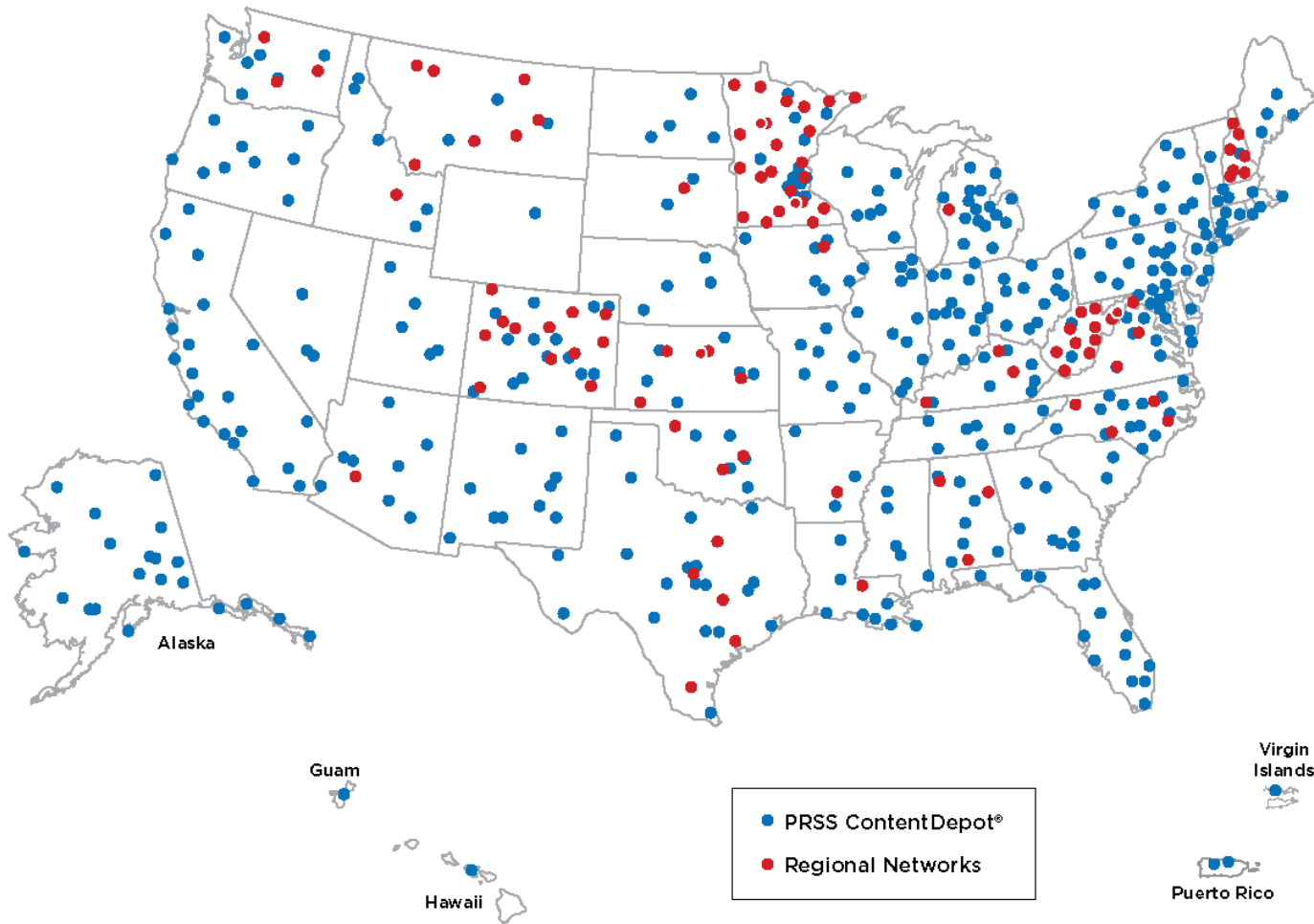
1. The PRSS is a Congressionally-supported and federally funded satellite-based public radio interconnection system built by NPR and public radio over the course of four decades.
2. The PRSS is a unique conduit for important programming, such as:
 - a. Rural and Native American news and cultural programming within those communities
 - i. Example 1: Native Voice One
 - ii. Example 2: West Virginia Public Radio
 - b. National distribution of local and regional voices
 - i. Example: Kansas News Service
 - c. Emergency Alert System notifications to remote areas
3. New terrestrial use of C-band spectrum would threaten the PRSS by introducing interference into the system's extremely low-power down links.
4. Full-band, full-arc licensing must remain in place to enable the PRSS and local stations to have the flexibility to adjust when there are disruptive events.
 - a. Example: 1998 Galaxy IV satellite disruption



The Public Radio Satellite System (PRSS) & C-Band

- PRSS, managed by NPR, distributes more than 450,000 hours of news, music and specialized audience programming for more than 100 producers, including NPR, APM and PRI
- PRSS reaches 95% of the U.S. Population
- PRSS connects:
 - 400 PRSS interconnected stations
 - 872 additional licensed stations
 - 1,278 broadcasting stations
- PRSS receives and distributes Presidential-level information from FEMA's national Emergency Alert System (EAS)
- PRSS is reliable: provides 99.99% uptime
- PRSS content is 80% live
- PRSS is open to all public telecommunications entities, including independent producers; program syndicators and distributors; national, state, and local organizations; and public radio stations

Public Radio C-Band Downlinks



475 total public radio downlinks

PRSS leases satellite transponders from Intelsat on C-Band and KU spectrum

Uplink Frequencies

Galaxy 01/Transponder1, C-Band
Galaxy 03/Transponder1, C-Band
Galaxy 05/Transponder1, C-Band
Galaxy 07/Transponder1, C-Band
Galaxy 17/Transponder1, Ku
14218.00)

(Lower Frequency 5927.00 to Upper Frequency 5963.00)
(Lower Frequency 5967.00 to Upper Frequency 6003.00)
(Lower Frequency 6007.00 to Upper Frequency 6043.00)
(Lower Frequency 6047.00 to Upper Frequency 6083.00)
(Lower Frequency 14210.80 to Upper Frequency

Downlink Frequencies

Galaxy 01/Transponder1, C-Band
Galaxy 03/Transponder1, C-Band
Galaxy 05/Transponder1, C-Band
Galaxy 07/Transponder1, C-Band
Galaxy 17/Transponder1, Ku
11918.00)

(Lower Frequency 3702.00 to Upper Frequency 3738.00)
(Lower Frequency 3742.00 to Upper Frequency 3778.00)
(Lower Frequency 3782.00 to Upper Frequency 3818.00)
(Lower Frequency 3822.00 to Upper Frequency 3858.00)
(Lower Frequency 11910.80 to Upper Frequency

PUBLIC RADIO INTERCONNECTION



The public radio interconnection system – known as Public Radio Satellite System® (PRSS) – is an essential piece of America’s nationwide public media system. Reaching even the most rural regions of the U.S., PRSS leverages cost-effective, high quality, and reliable satellite and digital technologies to provide the infrastructure that allows stations to:

1. Send and receive programming
2. Receive and distribute Presidential-level information from FEMA’s national Emergency Alert System

WHY IS INTERCONNECTION ESSENTIAL?

Without interconnection, the U.S.’s nationwide public radio and public safety information distribution systems would cease to exist as they do today.

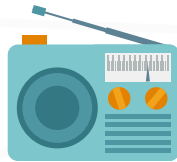
Local Programming

PRSS allows stations to receive programming from more than 100 program producers and distributors and distribute it to virtually all Americans, including those living in rural areas.



450,000+

hours of news, music,
and other programming
distributed annually



1,278

public radio stations
connected



100+

program producers &
distributors



95%

of the U.S. population
reached

Public Safety

Public media’s infrastructure system provides Americans with timely, critical information before, during, and in the wake of emergencies.

How It Works:

PRSS receives the Presidential-level Emergency Alert System feed directly from FEMA, which it then transmits to 1,278 independently-owned stations nationwide. These stations broadcast the alerts across America, even when power grids and internet services are down.



FEMA



1,278 stations nationwide



300 million Americans



SUSTAINING AMERICA'S PUBLIC RADIO INTERCONNECTION SYSTEM



During the Reagan Administration, Congress authorized a separate public media interconnection system appropriation via the Public Telecommunications Act of 1988.

Since then, Congress has appropriated funding to maintain or replace PRSS in 10-year cycles. This ensures that the system continues to employ the most cost-effective, efficient, and reliable means of programming and public safety information distribution.

The public radio interconnection system's most recent appropriation is scheduled to expire in 2018, along with PRSS's essential satellite leases.

Amount Requested for Public Media Interconnection (public radio & television combined) in FY 2018: **\$55 Million**

MAINTAINING AND BUILDING CAPACITY

PRSS requires replacements and upgrades to ensure that our nation's public radio stations remain connected, including:

- Procurement of necessary satellite capacity
- Maintenance of still functional equipment and technologies
- Implementation of new, more cost-effective, efficient, secure, and reliable technologies
- Integration of new features, including more efficient use of bandwidth and automation to enhance operations at local stations
- Replacement of equipment that has reached the end of its useful life or no longer has replacement parts available on the market

ENSURING THAT PRSS REMAINS COST-EFFECTIVE

PRSS is dedicated to utilizing the most cost-effective, secure, and reliable technologies on the market.

In June of 2016, the Corporation for Public Broadcasting engaged an independent consultant to review the proposed replacement plan for PRSS. The consultant found: "No other alternative discussed or examined – including commercially available options – is more cost effective or likely to result in success."

The cost of public radio interconnection is decreasing as technology rapidly improves.

The projected cost of PRSS improvements and replacements is \$53.5 million over 10 years. This is a \$24.5 million (31 percent) cost reduction from the most recent decade's interconnection replacement project.